Questions & Answers
from the
February 9 Budget Workshop

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Table of Contents

Section 1
Capital Affordability

1. What Is the duration of debt obligations for the city's portfolio?

The city utilizes various forms of debt financing within the full portfolio to include general obligation (GO) bonds, certificates of participation (COPs), revenue bonds and bond anticipation notes (BAN). In addition, the portfolio is categorized by the applicable credit entity it supports to include general CIP (the Steady State), hospitality funds (Convention Center, NASCAR Hall of Fame, Tourism), and enterprise funds (Aviation, Charlotte Water, Storm Water and CATS). In general, GO bonds are issued to support the Steady State CIP as 20-year debt; revenue bonds are issued to support the enterprise credits as 30-year debt; BANs are used to support most of the credit entities and are a two-year liability; and COPs support most credit entities, and the term will vary based on the useful life of the asset(s) being financed.

Most of the city's portfolio is issued as fixed rate debt and therefore, is not impacted by interest rate changes/fluctuations. For the Steady State, the city typically issues debt every other year, and as a result is subject to market/interest rate risk at the time of a new long-term fixed rate issuance. The BANs are construction period financing whereby the city reimburses itself as it incurs expenses for projects for a 24-month projected cashflow and at variable rates. Once a BAN is fully spent, it is converted to a 20-year fixed issuance. BANs provide both increased flexibility and cost savings to the city while projects are in development and construction.

City of Charlotte Outstanding Debt			
Credit Entity	Form of Debt	Debt Outstanding	Final Maturity
Steady State	General Obligation (Transportation/ Neighborhoods)	$ 725.5M	2041
	General Obligation Affordable Housing	$ 63.9M	2039
	Steady State Certificates of Participation	$ 188.0M	2042

*Average Life of Steady State portfolio is 7.5 years
**As of 6/30/2022
*** Includes BANs

City of Charlotte Total Debt Portfolio		
Charlotte Debt Portfolio Credit Entity	Debt Outstanding	Final Maturity
Steady State GO (Total)	$ 789.5M	2041
Steady State COPS	$ 188.0M	2042
Convention Center	$134.9M	2049
NASCAR HOF	$ 101,7M	2039
Tourism	$190.0M	2039
CATS	$ 234.2M	2048
Water/Sewer	$1,573.7M	2051
Storm Water	$ 219.2M	2051
Aviation	$ 1,303.8M	2053

*As of 6/30/2022
** Includes BANs

Section 2
Existing Bond Project Updates

1. Are there capital projects at-risk of going over budget? What are the budgets for these projects?

The table below highlights projects with budgets classified with an over budget or at budget risk status. The budget status is of February 2023. The total range of Transportation Bond projects that are currently over budget is $10 million-$34 million. For the COPS projects that will be bid in FY 2024, the overbudget range is $9 million-$20 million. The budget status is of February 2023.

Project Name	Project Budget*	Primary Funding Type	Budget Status
Idlewild Road/Monroe Road Intersection	$19,326,097	Transportation Bonds	Over Budget
Monroe Road Streetscape	$13,500,000	Transportation Bonds	Over Budget
Eastway Drive/Shamrock Drive Intersection	$39,019,000	Transportation Bonds	At Risk
Rea Road (with Bonus Allocation Funding)	$14,273,940	Transportation Bonds	At Risk
Research Drive - J.W. Clay Connector over I-85 (North Bridge)	$42,823,152	Transportation Bonds	Over Budget
South End Rail Trail I-277 Pedestrian Bridge	$13,788,600	Transportation Bonds	Over Budget
ESBI - Monroe Road Multi-use Path	$5,395,809	Transportation Bonds	At Risk
XCLT Segment 6 - Matheson Avenue to Craighead Road	$21,582,476	Municipal Debt	At Risk
XCLT Segment 10 - Mallard Creek Church Road to Pavilion Boulevard	$9,443,000	Municipal Debt	At Risk
XCLT Segment 11 - Pavilion Boulevard to Kempsford Drive	$10,934,000	Municipal Debt	At Risk
NECI - Sugar Creek Road Streetscape	$8,240,000	Transportation Bonds	At Risk
NECI - McCullough Drive Streetscape	$22,832,324	Transportation Bonds	Over Budget
NECI - Dave McKinney Avenue Extension	$6,000,000	Transportation Bonds	At Risk
Morris Field Drive Bridge Replacement	$4,207,352	Transportation Bonds	At Risk
Rivergate Parkway Bridge	$1,350,000	Transportation Bonds	Over Budget
AIC - Matheson Avenue Bridge	$6,727,015	Transportation Bonds	Over Budget
CNIP - Central/Albemarle/Shamrock - Central/Kilborne/Norland Ped/Bike Improvements	$6,150,000	Neighborhood Bonds	At Risk
CNIP - Prosperity Village - DeArmon Road Complete Street Improvements	$22,021,250	Neighborhood Bonds	At Risk
CNIP - Prosperity Village - Prosperity Church Road (Old Ridge to Benfield) Improvements	$8,183,705	Neighborhood Bonds	At Risk
CNIP - Sunset/Beatties Ford - Beatties Ford/Sunset Ped Improvements (former Hornets Nest Park Access)	$8,712,390	Neighborhood Bonds	At Risk

Project Name	Project Budget*	Primary Funding Type	Budget Status
CNIP - Sunset/Beatties Ford - Oakdale/Miranda/Sunset Intersection	$970,000	Neighborhood Bonds	At Risk
CNIP - Whitehall/Ayrsley - Brown - Grier Road Upgrades	$22,860,999	Neighborhood Bonds	At Risk
Six Police Division Stations - CMPD Northwest Station	$16,184,099	COPS	Over Budget
Fire - Firehouse #11 Replacement	$18,980,000	COPS	At Risk
Fire - Hidden Valley Firehouse #45	$14,430,000	COPS	At Risk
Fire - Firehouse #30	$16,390,000	COPS	At Risk
CMGC HVAC Replacement	$25,260,000	COPS	At Risk
***Project Budget includes funding from other sources (Charlotte Water, Storm Water, CRTPO, etc.)**			

2. Does the city program cost escalation considerations into project planning?

The city includes escalation prices in capital project planning. When many capital projects were budgeted, an inflation factor of three to six percent per year was applied for all project types (horizontal transportation, bridges, and vertical facilities). Recently, when setting budgets for new projects, the following inflation factors were applied to horizontal transportation/bridge projects: ten percent for two years, plus seven percent for the next three years, plus five percent for additional years. On vertical facility projects, the inflation factors are seven percent for three years, plus five percent for additional years. The city continues to monitor inflation trends and adjust as needed. The tables below summarize current escalation factors used for capital project planning.

Horizontal Transportation and Bridge Projects: Inflationary Factors

Project Timeline	Inflationary Factor Percentage
Years 1-2	10%
Years 3-5	7%
Additional Years	5%

Vertical Facility Projects: Inflationary Factors

Project Timeline	Inflationary Factor Percentage
Years 1-3	7%
Additional Years	5%

Section 3
City Facility Program

1. Why weren't CARES funds used for the HVAC facility project?

Federal guidance states that the Coronavirus Relief Funds (CRF) provided by the CARES Act must be used for "necessary expenditures incurred due to the public health emergency with respect to COVID-19". To reduce the risk of spreading COVID-19 and to promote the health of city employees working in-person throughout the pandemic, the city used $5,486,191 of CRF funding to install bipolar ionization technology in heating, ventilation, and air conditioning (HVAC) systems across city facilities. This technology can remove up to 99 percent of airborne viruses, mold, and bacteria by creating and releasing ions that aggregate these pathogens into clusters, making them easier to filter from the air. The technology was installed on the existing HVAC systems in the city facilities. The specific health benefits associated with technology made this project eligible under the federal guidance for the CRF, whereas the project to replace the CMGC's HVAC system falls outside the scope of "necessary expenditures incurred…due to COVID-19". Further, the CRF could only be used to cover expenses that were incurred between March 1, 2020, and December 31, 2022, and the CMGC HVAC replacement project is currently scheduled for bidding in the first quarter of 2026.

2. What is causing high energy use for Eastway and Freedom CMPD divisions?

CMPD Eastway and CMPD Freedom Divisions were designed prior to the updated and SEAP aligned Sustainable Facilities Policy. While energy savings projects have been implemented throughout the previous 12 months, these buildings were designed with less efficient - lower cost in terms of capital dollars - HVAC systems. Lower up-front cost less efficient HVAC systems were installed which are not energy efficient. These systems continue to adversely impact the energy performance compared to buildings with more efficient systems.

CMPD Freedom Division is due for a lighting upgrade as well as an outside air system which can reduce the energy use of that building; however, this building also has a public meeting auditorium, which is atypical for police stations. CMPD Freedom Division was also prioritized for solar through City Council's sustainable infrastructure funding in FY 2021. Solar is currently under construction and once completed and will offset energy use.

CMPD North Division is a leased facility, and therefore is not within the city's immediate purview for many energy savings measures.

3. Provide bond and debt capacity that includes COPS programmed projects and available capacity.

The average COPS funding for each two-year cycle for FY 2024-2025, FY 2026- 2027, and FY 2028-2029 is $29.5 million. The current Steady State affordability assumes $210 million in bond capacity and $29.5 million in average COPS capacity, for a total of $265 million. The COPS funding varies from year-to-year based on project types and anticipated completion schedules.

Bond Capacity	$210M
Average COPS Capacity	$27M
Total Capacity	**$237M**

4. What are the metrics used and potential savings identified thus far from implementation of SEAP policy and standards?

The city will soon begin construction on the first new building under the updated SEAP-aligned Sustainable Facilities Policy. As an example, the Sustainable Facilities savings as compared to code standards on Fire House 45 once constructed are projected below:

- Fire House 45:
    - 35 percent Energy Use Reduction
    - 30 percent Water Use Reduction

While the city is constructing new, more efficient buildings under Council's updated Sustainable Facilities Policy, the city will continue to benchmark existing buildings, and leverage sustainability funds to conduct measures such as energy audits, envelope testing, and retro-commissioning. Findings of these measures will drive project prioritization implementation as funds become available. Through ongoing metrics identified in the Energy Benchmarking Report and ongoing energy management, the city will continue to measure the energy use intensity and the impact of energy efficient measures.

In addition to energy use, the renewable energy generated at city facilities will be measured. There is currently 1,003 kW of operational solar photovoltaic (PV) at ten city facilities. There is another 1,032 kW under construction at 14 city facilities and an additional 160 kW under design at three city facilities. Once all the systems are completed, the city will have a total of 2,194 kW of solar PV in operation. This is equivalent to the capacity to offset the electricity usage of approximately six city buildings.

Section 4
Corridors of Opportunity

1. **How does the city leverage private investments through the Equity Initiative? Provide examples of how this framework has been implemented in practice.**

   In addition to working with Living Cities and Main Street, the Corridors of Opportunity Team is also growing partnerships with organizations such as United Way, Lowe's, Wells Fargo, the YMCA of Greater Charlotte, the Knight Foundation and Local Initiatives Support Corporation (LISC). In total, these partnerships have resulted in over $35 million of private investment in the Corridors of Opportunity. Partnerships can take many forms with some organizations doing complementary work to the city's investment in loan programs, affordable housing, and workforce development, or through grants that supplement and amplify the City of Charlotte's programs.

   An example of a how this work includes the Equity in Governance Framework is the Lowe's partnership grant for the Safe Home Rehabilitation Program. The program prioritizes low-income residents that need home repairs and make under 60 percent of the area median income. Focused in west Charlotte, the program prioritizes disenfranchised individuals and creates opportunity for upward mobility. An example of an outside organization implementing a complementary program is the Wells Fargo and CLT is Creative façade beautification partnership in Sugar Creek, West Boulevard, and Wilkinson Boulevard that provided small businesses marketing and art- meaningfully engaging the community and businesses in the process.

2. **Provide a breakdown by corridor of grants awarded through Beyond Open CLT.**

   As of January 2023, the Beyond Open CLT program has issued $5.9 million in grants to help build economic mobility in Charlotte for minority, woman, veteran, and LGBTQ small businesses. Grants, that range from $5,000-$250,000 help small businesses acquire capital assets such as equipment, technology, real estate, and inventory. Of round one participants, 72 percent of participants identified as located within or near/adjacent to one of the six Corridors of Opportunity. Additional information and context around Corridor findings will be available by report in March from Foundation for the Carolinas.

3. **What milestones and metrics is the city tracking and how is the city mitigating risks of things like displacement? What does success look like in the Corridor program?**

   City staff and the NEST Commission are currently working with consultants to develop an anti-displacement strategy that includes specific objectives and measurable goals. A draft strategy is scheduled to be shared with Housing, Safety & Community Committee in June. The strategy will create the city's anti-displacement approach and metrics (outlined below), identify gaps, prioritize recommendations based on impact and effort, and develop an actionable anti-displacement strategy with specific objectives and measurable goals.

   While displacement is difficult to quantify and measure, existing data enable city staff to gain insights into displacement risk, neighborhood change, housing affordability, housing stability, and forced displacement. The city's Innovation & Data team monitors and track data and indicators related to displacement (see list below). These data are used to design and modify programs, catalyze collective

action in to help residents stay in place, and inform the development of displacement mitigation strategies now and in the future.

Housing and Neighborhood Services – Innovation & Data Team's data and indicator list

- Displacement Vulnerability Indicators (part of the Equitable Growth Framework of the Charlotte Future 2040 Plan)
- Neighborhood Change Indicators (part of the Housing Locational Tool)
- Displacement Risk Dashboard (combines the vulnerability and neighborhood change indicators into neighborhood-level displacement risk)
- Affordable Housing Gap (dashboard forthcoming)
- Inventory of Naturally Occurring Affordable Housing units and affordable housing units that are income-restricted (Quality of Life Explorer)
- Evictions and large-scale displacements
- Patterns of household movement between neighborhoods across Charlotte-Mecklenburg

The city, along with partners throughout the community, are working to mitigate displacement risk through a broad approach that includes:

1. Leverage Data and Technology
    - Displacement risk dashboard and site-specific displacement monitoring
    - Land acquisition analysis
    - Automated notifications and communication
2. Robust Community Engagement
    - Connecting residents to resources
    - Neighborhood tools, trainings, workshops and grants
    - Community visualization surveys
3. Current Programs and Initiatives
    - Housing programs and services
    - Rent and utilities assistance
    - Jobs and workforce development
    - Small business support
    - Neighborhood capacity building
4. Development of New Tools and Strategies
    - Staying in Place pilot program
    - Charlotte Neighborhood Equity and Stabilization (NEST) Commission
    - Displacement event rapid response

Additional Questions

1. **How are achievements in the city's Vision Zero initiative benchmarked?**

   Charlotte renewed its commitment to safer streets in 2019 with the adoption of Vision Zero and the associated Action Plan, an initiative designed to reduce crashes and eliminate traffic-related deaths and severe injuries. This commitment was reinforced when Charlotte City Council adopted the Strategic Mobility Plan in 2022, which is centered on the goal of "Safe and Equitable Mobility." Also adopted in 2022, the Charlotte Streets Manual is a support document for implementing the Unified Development Ordinance and includes how development will contribute to building complete streets that are safe and accommodating for all modes of travel.

   The Vision Zero Action Plan includes four focus areas with 32 individual benchmarks: 1) Create Safe Streets for all Users, 2) Shape Community Culture of Safety, 3) Analyze the Data, and 4) Evaluate Policy and Legislation. Several of the benchmarks are tracked through the city's performance measures and are reported on annually. Examples of these are new or improved pedestrian crossings and street lighting on High Injury Network (HIN) Corridors. As speed is a factor in many severe and fatal collisions, staff routinely analyzes speed limits on HIN corridors, looking for opportunities to make streets safer by lowering the speed limit. CDOT works closely with our partners at CMPD to use a data-driven approach to focus speeding enforcement efforts. CDOT is completing a 2022 report that will be available in Summer 2023.

   The city was recently awarded a USDOT Safe Streets for All Grant, which will leverage federal and local dollars and accelerate the deployment of pedestrian and bike infrastructure projects.

2. **What is the bond capacity if we removed transportation projects? What is the amount available and what are the transportation projects if considering separately?**

   Of the $210 million in the current Steady State, the transportation bonds for each bond year in FY 2024 – FY 2029 are $93.3 million, $123.7 million, and $102.3 million respectively for a total of $319.3 million. This includes the FY 2024- 2029 named projects for $137.3 million, and the other transportation projects for $182 million. The additional bond capacity if the transportation projects are removed for FY 2024 – FY2029, is $116.7 million, $86.3 million, and $107.7 million respectively. The additional bond capacity includes the unprogrammed capacity that is recommended for existing bond project cost increases. The table below summarizes the bond impact of the transportation projects.

Transportation Projects	2024 Bond Plan (FY 2025)	2026 Bond Plan (FY 2027)	2028 Bond Plan (FY 2029)
Named Projects	$28.3M	$66.7M	$42.3M
Other Transportation Projects	$65M	$57M	$60M
Total Transportation Bonds	**$93.3M**	**$123.7M**	**$102.3M**
Steady State Affordability	$210M	$210M	$210M
Additional Bond Capacity if Transportation Projects Removed*	**$116.7M**	**$86.3M**	**$107.7M**

*Includes unprogrammed capacity that is recommended for existing bond project cost increases

3. Explain how growth affects city service delivery. Give examples of how revenues are offset by additional growth.

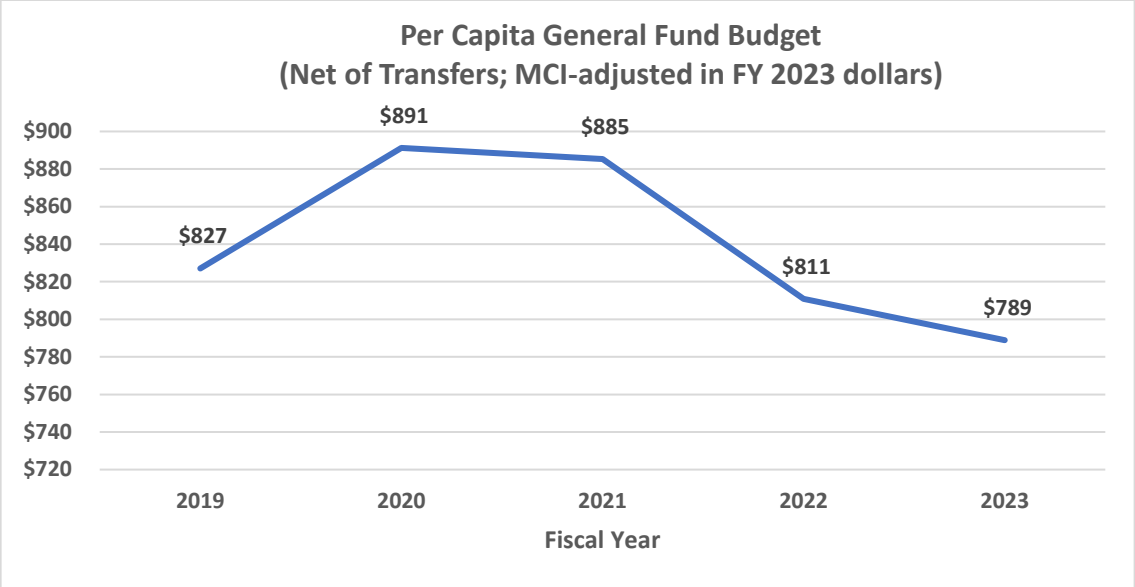
Annual Revenue Growth and the Budget Process: The city's annual budget process centers around projections of revenues and expenses (i.e., the cost of providing core services) in the upcoming fiscal year. Absent a large disruptive event, revenues and expenses typically grow gradually each year due to inflation, development, and other factors.

The cost of day-to-day operations and the provision of core services are funded through the city's General Fund. The General Fund is primarily supported by property tax, sales tax, and license/fee revenues (54 percent, 16.5percent, and 15.0 percent of the General Fund revenue budget in FY 2023, respectively). Growth in property tax, the General Fund's largest source of revenue, is driven by new development, which consists of new buildings or expansions of existing properties. Revenue from existing properties does not change without a tax increase. This remains true in the aggregate during a revaluation year, even though individual tax bills go up and down.

While new development generates more revenue for the city, it also increases the city's expenses, as core services are provided to an increasing number of residents and properties. The specific revenues and expenses generated by an individual development vary depending on many factors such as the type (e.g., residential vs. commercial), location (e.g., center-city vs. outer neighborhoods), and size (e.g., single-family home vs. multi-family complex) of the development. Rather than budget for growth on a per-development basis, the city manages growth holistically through the annual budget process.

During the budget process, individual departments assess their existing resources against the projected cost of operating and providing core services in the upcoming fiscal year, including any pressure caused by development in the city. Some growth pressure can be absorbed with existing resources through department reorganization and other efficiency improvements. When departments have needs that cannot be addressed in this way, departments submit budget requests for new resources during the budget development process.

Figure 1 below shows the per capita General Fund budget after adjusting for transfers between funds within the city ("net of transfers") and inflation using the Municipal Cost Index (MCI). This figure gives the per capita General Fund cost of the city's core services. The FY 2020 increase is driven primarily by a decline in the city's estimated population due to the COVID-19 pandemic. Since FY 2020, the per capita cost of government has declined as is currently at a five-year low. This reflects strategic improvements to operational efficiency made through budget reductions in the past three budget cycles. Over this same period, annual growth in the General Fund budget has outpaced the combined growth of property, sales, and utility franchise taxes by an average of 1.4 percent. Because these three revenue sources make up a large percentage of the General Fund budget (77 percent in FY 2023), the city has relied on other revenue sources to offset the lag in tax revenue growth.



Note: The FY 2020 increase is due to a decline in estimated population driven by the COVID-19 pandemic

User Fee Supported Services: Although the costs of most city services are not analyzed on a per-development basis, there are exceptions. Some services are tied to user fees which offset some or all of the cost of providing the service. These user fees fall into two categories, "regulatory" and "non-regulatory".

Regulatory fees are charged for specific city services that are required by law (e.g., land use permits, licenses for certain types of businesses, etc.). City Council adopted a cost recovery policy effective July 1, 2005, that requires each regulatory user fee to be based on 100 percent cost recovery for the cost of providing the service. Because of this policy, the cost of providing these regulatory services to new developments is completely offset by the associated fees.

Non-regulatory user fees recoup costs associated with services and use of facilities that are unrelated to regulations (i.e., city services that are not required by law). The basis for non-regulatory fees varies depending on the service being provided. For example, cemetery fees are based on competitive market pricing, whereas certain fees charged by the airport are based on negotiated contracts. The cost of providing these non-regulatory services to new developments is at least partially offset by the associated fees. A complete schedule of the city's current user fees can be found in the FY 2023 Adopted Budget.

Growth Pressure on Core Services: In addition to user fees, cost pressures associated with development are indirectly funded through the tax revenue generated by the development. As stated before, the city doesn't budget for core services on a per-development, per-service basis. However, per capita cost estimates and trends in performance metrics of certain services can serve as an imperfect proxy for pressures caused by growth and development.

CMPD example: The example below uses a set of assumptions based on historic and current-year data to estimate the per-capita personnel costs associated with CMPD's response:

$$2.04\ officer\ hours/_{911\ call} \times \$75.52/_{officer\ hour} \times 371{,}334\ calls/_{897{,}303\ residents} = \$63.76\ per\ resident$$

- 2.04 officer hours per 911 call requiring a patrol response based on CY 2022 average across all call types and call priorities
- $75.52 per officer hour based on CMPD's internal FY 2022 Cost Allocation Plan, and includes overhead and indirect costs
- 371,334 - 911 calls required a patrol response in CY 2022
- The U.S. Census Bureau's 2021 population estimate is 879,709. Assuming 2% annual population growth, 2022 population was assumed to be 897,303

This kind of per-capita cost estimation presented in this example may be useful when benchmarking the efficiency of certain service provision across cities. However, there are risks to over relying on these estimates when budgeting. Cost estimates for many core city services rely on assumptions which may not hold true over time. For example, the number of calls per resident shown above may vary with nationwide crime trends and residents' perception of safety, and the average number of officer hours spent responding to individual 911 calls may vary with improved technology. Further, the act of development itself may affect these assumptions (e.g., development that reduces blight may reduce crime). The example above also only accounts for the personnel costs associated with CMPD's 911 response. Other components of the overall cost of this service are shared with other city services (e.g., CMPD telecommunications are also involved with part of the fire and medic dispatch process; vehicle costs are shared with services such as proactive policing and community engagement; and software and equipment costs are shared with proactive policing, crime scene investigation, and other crime solving activities). Allocation of these costs between the many services they support would require further assumptions, which would in turn affect the overall accuracy of the estimate.

Residential Solid Waste Collection: A similar per-customer cost can be estimated for the city's residential solid waste collection and disposal services. The total FY23 budget for garbage, recycling, bulky, and yard waste collection and disposal is $74,922,203, including an allocation of overhead and annual capital costs associated with maintaining the solid waste fleet. The city has provided these services to an estimated 372,381 customers in FY 2023, resulting in an average per-customer cost of $201.20.

While this figure gives a generalized measure of the cost to provide solid waste services to new developments in the city, it includes both the fixed (e.g., overhead and facilities), and incremental (e.g., disposal fees, wages, and fleet) costs associated with these services. The true incremental cost attributable to new development is difficult to estimate, as the city's existing resources are able to absorb some of the pressures caused by incremental growth. Some level of pressure can also be absorbed by improvements to operational efficiency. For example, the city has been transitioning to automated collection trucks that are able to service routes more quickly, safely, and with less manpower. The city has also transitioned to paper bags and resident-provided reusable containers for yard waste collection, which are safer and easier to collect than the previously used plastic bags.

Capital Investment in Fire Facilities: Growth and development within the city also creates the need for improvement, expansion, or construction of new city facilities and infrastructure. These capital cost pressures associated with development are addressed through the city's Capital Investment Plan (CIP). The capital investment planning process is an annual effort that begins with departments prioritizing requested projects. These requests include facility and infrastructure needs caused by projected growth in the city. Similar to General Fund budget development, facility and infrastructure needs are not assessed on a per capita or per development basis, as the city's capital needs to not necessarily scale linearly with

new construction. Methods for monitoring and projecting pressures caused by development, and assessing the needs caused by these pressures, vary between departments. These differences in need are largely driven by differences in operating procedures and service delivery models.

For example, CFD responds to emergency calls directly from fire stations across the city. CFD's ability to quickly respond an emergency is dependent on the station's proximity to the scene and traffic between the station and the scene. Both factors are directly affected by new development in the city, but different types, locations, and sizes of developments will put different levels of pressure on CFD's existing resources (e.g., a new 100-unit apartment building three blocks from an existing station will have a different effect than 30 new single-family homes scattered across a neighborhood). Because of these differences, the city examines trends in CFD response time to determine where new resources are needed, rather than examine the specific impacts of individual developments. On average, each station currently serves approximately 21,800 residents and has an average annual operating cost of approximately $2.5 million. The city has estimated the construction cost of new stations to be $20 million.

Water and Sewer Infrastructure: In contrast, the growth pressures experienced by Charlotte Water are more directly attributable to individual developments. These growth pressures consist of the cost to connect a new development to the city's water and sewage system, and the pressure that the development's water usage and sewer output will put on the system's capacity. The costs associated with these factors are recovered through a mix of usage, availability, and connection fees:

- Usage fees are designed to recover both operating and capital costs associated with each stage of the water and wastewater treatment, transmission, and distribution process.
- Availability fees are fixed fees designed to offset the costs of maintaining and constructing water and sewage infrastructure by recovering 40% of Charlotte Water's annual debt service costs. These fees are applied on a per-meter basis and are assessed regardless of water usage.
- Connection fees are one-time charges to recover the cost of connecting a new development to the water and sewer system.

The specific fees charged to a particular customer depend on the type and size of development being served, and for some developments the amount of water use. For example, special charges apply to industrial and commercial customers that discharge high strength wastewater that requires increased treatment. Charlotte Water uses a sophisticated rate model to ensure that the fees assessed to a particular customer are commiserate with the costs of providing service to that customer.